Pacific Northwest National Laboratory Environmental Management Performance Report

March 2001

PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
OFFICE OF ENVIRONMENTAL MANAGEMENT

Pacific Northwest National Laboratory
Operated for the U.S. Department of Energy
by Battelle Memorial Institute

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This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

In Section A, the Executive Summary, text and graphics report the safety metrics status for all PNNL activities. Senior management's overall performance assessment of all Environmental Management activities conducted at PNNL is presented in a stoplight chart.

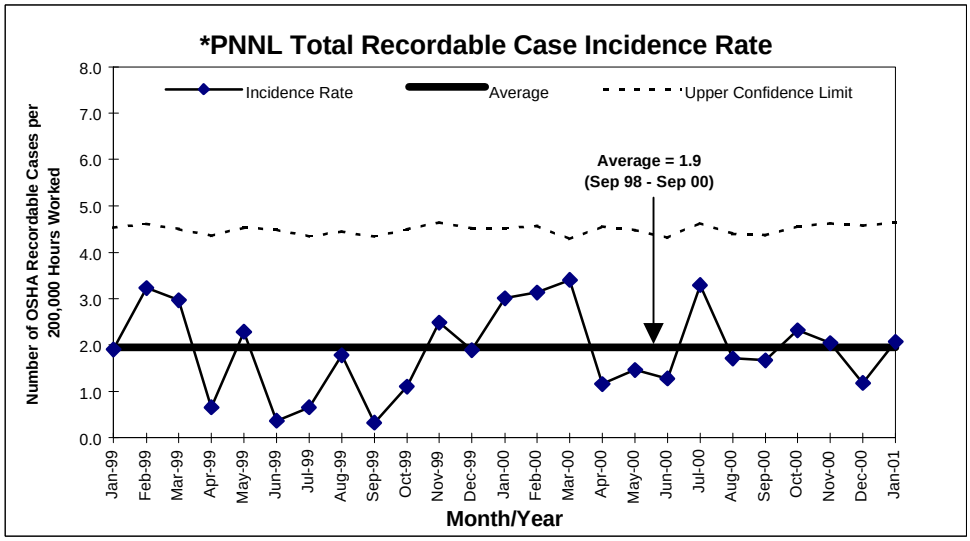
Section B, Project Performance Summary, provides a brief summary of the month's performance for the PNNL lead activity, PNNL Waste Management (PBS RL-ST01). More detailed information can be found within PNNL-7911-112a, PNNL's Project Status Report for January 2001. Summary analyses pertaining to PNNL's support to other Project Baseline Summaries (PBSs) are addressed in the contractor's report having lead responsibility for that scope.

Unless otherwise noted, information in this report is current as of January 28, 2001.

This section provides an executive-level summary of performance information and is intended to bring to management's attention that information considered to be most noteworthy. The section begins with overview of safety, a summary of FY 2001 performance, a summary of Fiscal Year (FY) 2001 Voluntary Protection Program (VPP) activities, followed by a stoplight chart on overall performance.

Safety Overview

The focus of this section is on documenting trends in work-related injury and illness rates. These are the same performance indicators as appear in the FY2001 Battelle Performance Evaluation and Fee Agreement, which is part of the Pacific Northwest National Laboratory Operations Contract. The monthly rates for Recordable and Lost Workday cases are presented graphically in this section and are monitored for statistically significant changes. Current efforts to improve performance are being made through the continued implementation of the Integrated Safety Management System (ISMS), and the development and implementation of the Voluntary Protection Program (VPP).

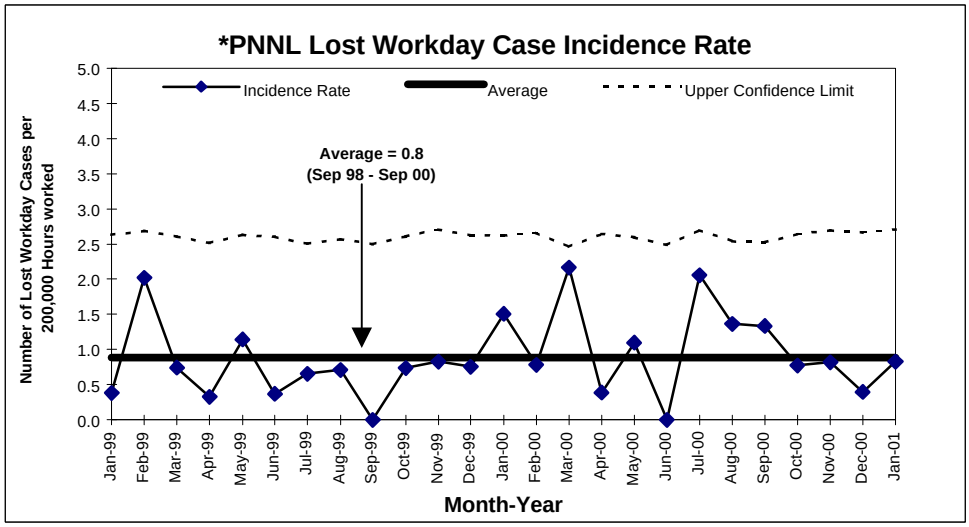


FY 01 Rate Overview:
Cumulative To Date =1.9
Lab Specified Level $\leq$ 2.2

This indicator has been generally stable over the long term. The data for FY01 continue to randomly fluctuate within the anticipated control limits.

Green

*Includes all Pacific Northwest National Laboratory Operations.



FY 01Rate Overview:
Cumulative To Date = 0.7
Lab Specified Level ≤ 1.1

This indicator has been generally stable over the long term. The data for FY01 continue to randomly fluctuate within the anticipated control limits.

Green

*Includes all Pacific Northwest National Laboratory Operations.

Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for activities conducted by PNNL. *(Narrative not required when rating is green.)*

Green

Green: Satisfactory
Yellow: Significant improvement required
Red: Unsatisfactory

This section provides cost and schedule performance, any significant issues, and upcoming baseline change requests, if any, for the period covered.. In FY 2001, Battelle Memorial Institute has lead responsibility over PBS RL-ST01, PNNL Waste Management WBS 1.7.1.

Mission

WBS 1.7.1 provides PNNL with waste management services and compliant operations in support of science and technology development for the multiprogram needs of the U.S. Department of Energy (DOE) Complex. These services include:

- essential surveillance and maintenance of DOE laboratory facilities assigned to PNNL for safe containment of radioactive and hazardous materials
- infrastructure required to manage wastes and effluents currently generated at the PNNL
- operational compliance services to meet regulatory requirements and operating permits including environment, safety, and health regulations
- management of legacy wastes and contamination remaining from past PNNL research operations.

Activity Summary

The following summarizes the activities associated with PNNL Waste Management services and operations conducted during January 2001.

- Scheduled Radiochemical Processing Laboratory (RPL) radiological surveys and nuclear control inspections were performed. Inspections were completed for all excess facilities scheduled plus one scheduled for February, which included 6652-H, 3614-A and 614 Byers Landing. No issues of significance were noted at any of the facilities. The 6652-H facility is now down posted from a radiological standpoint following removal of hoods, blowers, filters and related equipment that occurred last FY. Opportunities to transfer a majority of the shutdown facilities as a “block” transfer continued. A Memorandum of Understanding (MOU) was routed in January for approval to begin the process. Minor legal comments were addressed and approval should occur next period. Efforts to repackage the stored uranium metal at 2718-E were completed this month. Twenty-four containers of uranium rods were repackaged in DOT 6M shipping drums. Shipment of the fuel is waiting Fluor Hanford scheduling.
- Scheduled routine waste management activities were performed during the period. All air and water samples required during the month of January were collected, and confirmed that all routine effluent discharges from Pacific Northwest operations reported to date are below historical release levels and compliant with existing state and federal permits.
- Seventy-seven National Environmental Protection Act (NEPA) reviews were completed on experimental projects within the Laboratory to ensure that the associated project scope will not have potential to create environmental risks. A NEPA categorical exclusion (CX) was prepared in January and approved by RL on February 1 that addresses the shipment of about

390 kgs of UO2 fuel rods from 2718-E to Sandia National Laboratories. This action supports a Tri-Party Agreement (TPA) milestone to remove fuel from Hanford facilities.

- The bowling ball cask waste has been packaged and the final disposal documentation has been processed. The five 55-gallon drums of waste will be shipped as soon as a shipping date is confirmed with Fluor Hanford. The drum shipment is expected to take place in late February.

Performance Data and Analysis

As of January 28, 2001 the cumulative costs are $3.7 million with a negative cost variance of $0.2M and a cumulative schedule variance of negative $0.5M. The cost variance is within the 10 % reporting threshold. A brief explanation for the variances will be described following the tables and chart.

Cost Performance ($M):			
	BCWP	**ACWP**	**Variance**
PNNL Waste Management	$3.5	$3.7	($0.2)
Schedule Performance ($M):			
	BCWP	**BCWS**	**Variance**
PNNL Waste Management	$3.5	$4.0	($0.5)

FY 2001 Cost/Schedule Performance - All Fund Types
Cumulative to Date Status - ($000)

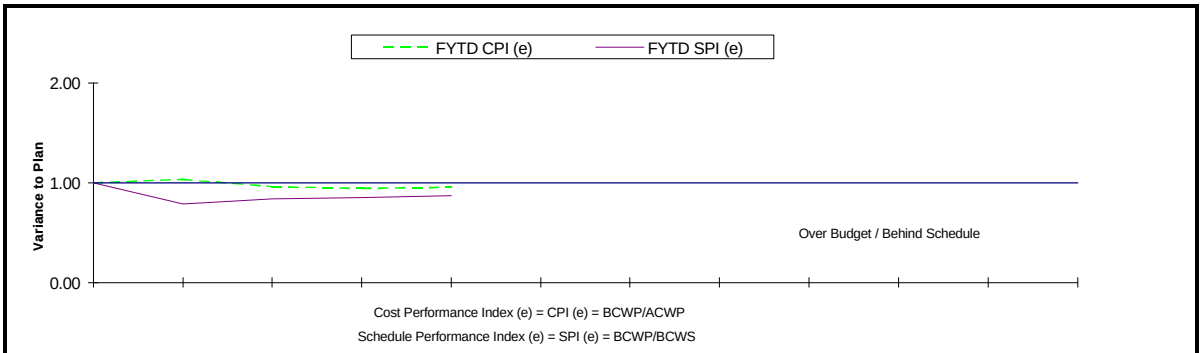
WBS	PBS	BCWS	BCWP	ACWP	CV	%	SV	%
1.7.1	RL-ST01	$4,014	$3,502	$3,667*	($165)	-5	($512)	-13
	Total	$4,014	$3,502	$3,667*	($165)	-5	$(512)	-13

* Numbers reflect PNNL system; per DISCAS actuals, including $ expended by Fluor for S&M of 242B/BL, are $3,692.7K.

Cost / Schedule Performance Indices

FY 2001 Cum to Date Status

($000s)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	TOTAL
Monthly BCWS	1034	877	1105	998	976	1026	1449	1201	1407	1769	1454	1762	15059
Monthly BCWP	812	798	961	931									3502
Monthly ACWP	785	888	1051	943									3666
Monthly CPI (e)	1.03	0.90	0.91	0.99									
Monthly SPI (e)	0.79	0.91	0.87	0.93									
FYTD BCWS	1034	1911	3016	4014	4990	6017	7466	8667	10074	11843	13297	15059	
FYTD BCWP	812	1610	2571	3502									
FYTD ACWP	785	1672	2723	3666									
FYTD CPI (e)	1.03	0.96	0.94	0.96									
FYTD SPI (e)	0.79	0.84	0.85	0.87									

The negative cost variance of $0.2M primarily results from completing FY 2000 scope offset by delayed billings. In addition, FY 2001 rates have been finalized and are higher than anticipated during the planning process. The impacts of the cost increase will be incorporated in the baseline change request resubmitted February 9 that also includes carryover activities.

The schedule variance for January, of negative $0.5M, is above the 10% threshold. The primary activities making up the negative schedule variance are as follows:

- Resolution on funding was received following the November Site Management Board meeting. Some activities need to be deleted or deferred and revisions to scheduled activities associated with funding allocations were included in baseline change request resubmitted February 9.
- Resource unavailability has delayed some Hazardous Waste Operations. These tasks will be caught up in later months as staffing adjustments are made.
- Delays were encountered with procurement of High Dose Solid Waste shielded drums. As a result of this delay the drum shipping dates for the 73 cans of transuranic (TRU)/low-level waste (LLW) was pushed into the first quarter of FY 2001.
- Delays have been encountered in design and engineering efforts for the heating, ventilation, and air conditioning (HVAC) controls upgrade/replacement within the Radiochemical Processing Laboratory (RPL). An integrated schedule for combined HVAC controls and switchgear replacement within the facility was submitted for approval February 9. Delays are not expected to impact completion date.
- The integrity assessment of the radioactive liquid waste tank (RLWT)-piping is currently on hold with no defined completion date. The integrity assessment and associated waste processing continues to be delayed because the 204-AR Facility (receiver facility) is not

ready, and Pacific Northwest does not want to add any liquids to the tank to make it a radiologically controlled tank until the receiver facility is ready.